

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method to boot up a server using a target storage device selected from a plurality of independent storage devices located in a subsystem over a network, comprising:

installing an operating system by storing the operating system and a dynamic configuration program in the target storage device selected from the plurality of independent storage devices located in the subsystem, identified by an internet protocol (IP) address input by a user, on the network wherein the location of the target storage device, where the operating system is installed, is ~~designated by an internet protocol (IP) address~~ identified by the user; and

accessing the operating system on the target storage device ~~using~~ at the IP address ~~and the dynamic configuration program~~, the accessing occurring through block data block transfers transfer.

Claim 2 (Currently Amended): A method to boot up a server as recited in claim 1, wherein the installing includes,

determining network system configuration after power on,

receiving instruction to install the operating system,

receiving the IP address of the subsystem and identification of ~~where~~ the target storage device where installation is to occur, as directed by the user ~~is located~~,

finding the target storage device at the internet protocol (IP) address over the network, and

copying the operating system into the target storage device over the network using block data transfer.

Claim 3 (Currently Amended): A method to boot up a server as recited in claim 1, further comprising:

setting up an additional server, to be booted up by the target storage device over the network, ~~by notifying the additional server of the IP address of the target storage device where the operating system is located~~ using programmed operations to enable the bootup of the additional server from the target storage device without user intervention.

Claim 4 (Original): A method to boot up a server as recited in claim 1, wherein the operating system utilizes a graphical user interface.

Claim 5 (Original): A method to boot up a server as recited in claim 1, wherein the target storage device is a one of a disk drive, a CD-R, and a CD-RW.

Claim 6 (Original): A method to boot up a server as recited in claim 1, wherein the server communicates with the target storage device by using iSCSI protocol.

Claim 7 (Original): A method to boot up a server as recited in claim 1, wherein the server includes an iSCSI card which facilitates iSCSI protocol communications between the server and the target storage device.

Claim 8 (Currently Amended): A method to boot up a server as recited in claim 1, wherein accessing the operating system includes,

accessing data at a first sector of a boot device, the location of the first sector being located in the target storage device designated by the IP address received during the installation process;[[,]]

retrieving the operating system boot loader at the first sector of the target storage device[[,]]; and

booting up using operating system data from the target storage device.

Claim 9 (Currently Amended): A method to install an operating system on a target storage device selected from a plurality of independent storage devices in a subsystem over a network, comprising:

initiating setup to install the operating system;

receiving an IP address of [[a]] the subsystem input by a user, where the operating system is to be stored;

determining the plurality of independent storage devices located in the subsystem;

receiving identification of a target storage device selected by the user from the plurality of storage devices located in the subsystem; and

installing the operating system in the target storage device selected from [[a]] the plurality of independent storage devices in [[a]] the subsystem using block data transfer.

Claim 10 (Original): A method to install an operating system as recited in claim 9, wherein initiating setup occurs when a particular keystroke is received.

Claim 11 (Previously Presented): A method to install an operating system as recited in claim 9, wherein determining the plurality of independent storage devices located in the subsystem includes,

instructing an iSCSI IOP to utilize a kernel to determine the plurality of storage devices located in the subsystem designated by the IP address.

Claim 12 (Currently Amended): A method to install an operating system as recited in claim 9, wherein receiving identification of a target storage device includes,

displaying the plurality of independent storage devices in the subsystem,

receiving input indicating the location of the target storage device to be used as a boot device.

Claim 13 (Original): A method to install an operating system as recited in claim 9, wherein iSCSI is utilized as a data transfer protocol.

Claim 14 (Original): A method to install an operating system as recited in claim 9, wherein the operating system is a graphical user interface system.

Claim 15 (Original): A method to install an operating system as recited in claim 9, wherein installing the operating system includes,

copying operating system files to the target storage device ~~by using the IP address~~
over the network using block data transfer.

Claim 16 (Currently Amended): A method to install an operating system as recited in claim 9, wherein installing the operating system on the target storage device allows a plurality of servers to be booted up by accessing the operating system on the target storage device through ~~notifying the plurality of servers of the IP address of the subsystem with the plurality of independent storage devices and the identification of the target storage device where the operating system is located~~ utilizing a dynamic host configuration protocol (DHCP) to find target storage device where the operating system is installed.

Claim 17 (Currently Amended): A method to boot up a server from a target storage device selected from a plurality of independent storage devices located in a subsystem over a network, comprising:

retrieving an operating system boot loader at a first sector of the target storage device selected from the plurality of independent storage devices located in the subsystem over the network, a location of the target storage device ~~being designated by~~ and an IP address of the subsystem stored being input by a user during an operating system installation process of the target storage device; and

booting up the server using ~~[[an]]~~ the operating system located on the target storage device by using the operating system boot loader.

Claim 18 (Previously Presented): A method to boot up a server as recited in claim 17, wherein data transfer of the operating system from the target storage device to the server is accomplished by use of an iSCSI protocol.

Claim 19 (Previously Presented): A method to boot up a server as recited in claim 17, wherein retrieving the operating system boot loader includes,

instructing an option ROM BIOS to direct a kernel to obtain an operating system boot loader at the first sector,

copying the operating system boot loader into memory on the server,

running the operating system boot loader to boot up the server.

Claim 20 (Previously Presented): A method to boot up a server as recited in claim 17, wherein booting up the server includes,

copying operating system data to memory on the server.